

Title (en)

Oxygen production by staged mixed conductor membranes

Title (de)

Herstellung von Sauerstoff mit mehrstufigen leitenden Mischmembranen

Title (fr)

Production d'oxygène avec membranes mixtes conductrices à plusieurs étapes

Publication

EP 0663230 B1 20010523 (EN)

Application

EP 95100243 A 19950110

Priority

US 18093694 A 19940112

Abstract (en)

[origin: EP0663230A2] High-purity oxygen is recovered from air by a high-temperature ion transport membrane system comprising two or more stages in which each stage operates at a different feed side to permeate side pressure ratio. Operation of the system in multiple stages at controlled pressure ratios produces oxygen at a lower specific power consumption compared with single-stage operation. <IMAGE>

IPC 1-7

B01D 53/22; **B01D 53/32**; **C01B 13/02**

IPC 8 full level

B01D 53/22 (2006.01); **C01B 13/02** (2006.01)

CPC (source: EP US)

B01D 53/225 (2013.01 - EP US); **B01D 53/226** (2013.01 - EP US); **B01D 53/227** (2013.01 - EP US); **C01B 13/0251** (2013.01 - EP US); **B01D 2257/104** (2013.01 - EP US); **C01B 2210/0046** (2013.01 - EP US); **C21B 5/00** (2013.01 - EP US)

Cited by

EP0848639A4; EP0997164A3; EP1040861A1; EP0916386A1; EA036885B1; US6319305B1; US9044704B2; WO2013192526A3; US10260416B2; EP1807137B1; WO2018042338A1

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